Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_

**Modified Lab Report: Bonding Lab**

Introduction

* Paragraph 1
  + Purpose of lab: determine if each substance is ionic or covalent based on melting point, solubility in water, and conductivity
  + Explain what ionic and covalent bonds are
    - Types of elements involved in each bond
    - What happens to electrons
    - What the properties are
    - **For full credit, include outside research and correctly cite using in-text citations and a works cited page (MLA format)**
* Paragraph 2
  + Hypothesis
    - Ionic compounds have \_\_\_\_\_\_\_\_\_ melting points, are \_\_\_\_\_\_\_\_\_\_\_ conductors of electricity, and are \_\_\_\_\_\_\_\_\_\_ soluble. Ionic compounds have these properties because...
    - Covalent compounds have \_\_\_\_\_\_\_\_\_ melting points, are \_\_\_\_\_\_\_\_\_\_\_ conductors of electricity, and are \_\_\_\_\_\_\_\_\_\_ soluble. Covalent compounds have these properties because...
  + Summarize procedure in 3 sentences or fewer
  + Explain safety risks of experiment
  + Explain how you minimized safety risks

Data Table: re-type from bonding lab packet

Data Analysis

* Paragraph 1
  + Identify each substance (1-6) as ionic or covalent and **explain how you know based on the properties you tested**
  + Discuss any irregularities in your data- did any of your covalent compounds seem to have ionic properties (or vice versa)? For full credit, conduct outside research to figure out why that might be.
* Paragraph 2
  + Discuss 2 sources of errors
  + Explain how the errors may have affected your data
  + Suggest how to fix errors in the future

Works Cited if applicable (MLA format)